

### **2.2.5 Remote Handled Waste Facility**

Wastes that have high surface radiation exposure rates or contamination levels require processing using remote-handling technologies to ensure worker safety. These are referred to as remote-handled wastes and will be processed in the RHWF.

The RHWF is currently under construction, but when complete it will be a free-standing facility, approximately 58 meters (191 feet) long by 28 meters (93 feet) wide by 14 meters (45 feet) high. It is located in the northwest corner of the WVDP site, northwest of the STS Support Building and southwest of the Chemical Process Waste Storage Area (see Figure 2-7). Primary activities in the RHWF will include confinement of contamination while handling, assaying, segregating, cutting, and packaging remote-handled waste streams. The RHWF will cut relatively large components into pieces small enough to fit into standard types of waste containers.

The RHWF contains a receiving area, buffer cell, work cell, contact maintenance area, sample packaging and screening room, radiation protection operations area, waste packaging and survey area, operating aisle, office area, and the loadout/truck bay. The shield walls, doors, and windows of the RHWF will be constructed so that the radiation exposure rate in normally occupied areas will be no greater than 0.1 milliroentgen per hour.

The wastes to be processed in the RHWF are a variety of sizes, shapes, and materials, including structural steel, concrete, grout, resins, plastics, filters, wood, and water. These materials will be in the form of tanks, pumps, piping, fabricated steel structures, light fixtures, conduits, jumpers, reinforced concrete sections, personal protective equipment, general rubble, and debris. Waste from the RHWF will be packaged into 55-gallon drums and B-25 boxes.

### **2.3 NO ACTION ALTERNATIVE – CONTINUATION OF ONGOING WASTE MANAGEMENT ACTIVITIES**

A no action alternative must be considered in all EISs to provide a benchmark against which the impacts of the proposed action and alternatives can be compared. For this project, the No Action Alternative means continuing with the waste management activities that were previously described in the *Final Environmental Impact Statement, Long-Term Management of Liquid High-level Radioactive Wastes Stored at the Western New York Nuclear Service Center, West Valley* (DOE 1982) and its two supplemental analyses, environmental assessments, and categorical exclusion documentation. These activities would include continued surveillance, maintenance, monitoring, and other operational support of facilities to meet requirements for safety and hazard management. A limited amount of Class A LLW would be shipped to NTS or to a commercial disposal site such as Envirocare (although shipments to Hanford are also included for the purposes of analysis). TRU waste would continue to be stored on the site. HLW would continue to be stored in the Process Building on the site. Management of the waste storage tanks would also continue as under current operations which provide for active ventilation of the tanks and the annulus surrounding the tanks that is filtered through multiple banks of high-efficiency particulate air (HEPA) filters before being discharged.

Under the No Action Alternative, waste management activities would include:

- Using the full capacity of the lag storage facilities (LSB and LSAs 1, 3, and 4). Currently, these facilities are at about 80 percent of their capacity.
- Processing waste from the Chemical Process Cell Waste Storage Area through the RHWF (see Figure 2-7) that is currently under construction, with the processed LLW being stored in one of the

other onsite storage facilities. The RHWF will be used for segregating, size-reducing, repackaging, and otherwise preparing remote-handled radioactive wastes for transportation and disposal.

- Continuing onsite storage of all wastes, with the exception of 4,100 cubic meters (145,000 cubic feet) of Class A LLW wastes that would be shipped off the site.
- Ventilating the waste storage tanks and their surrounding vaults to manage moisture levels as a corrosion prevention measure.

Shipments under the No Action Alternative would be limited to 4,100 cubic meters (145,000 cubic feet) of Class A LLW addressed under previous NEPA documentation, until more extensive shipping can be assessed under the other alternatives in this EIS. Class A LLW is currently being shipped to Envirocare and NTS; however, for the purposes of analysis, shipments of these wastes to Hanford have also been assessed under the No Action Alternative. Table 2-2 identifies the number of containers and shipments required to dispose of up to 4,100 cubic meters (145,000 cubic feet) of Class A LLW.

**Table 2-2. Waste Shipped Under the No Action Alternative**

Waste Type	Container Type	Waste Shipped (cubic feet) <sup>a</sup>	Number of Containers	Number of Shipments
Class A LLW	Boxes	97,649	1,206	87 (truck) 44 (rail)
	Drums	47,351	6,878	82 (truck) 41 (rail)
<b>Total</b>		<b>145,000</b>	<b>8,084</b>	<b>169 (truck) 85 (rail)</b>

a. To convert cubic feet to cubic meters, multiply by 0.028.

Class A LLW would be disposed of at Hanford, NTS, or a commercial disposal site such as Envirocare. Activities at those sites would include unloading trucks or railcars, inspecting the waste containers, and moving the waste to the disposal areas for shallow land burial. Waste handling and disposal activities at Envirocare are regulated by the NRC and the State of Utah under a Radioactive Material License (UT2300249). LLW handling and disposal activities at Hanford and NTS are described in the *Draft Hanford Site Solid (Radioactive and Hazardous) Waste Program Environmental Impact Statement* (DOE 2002b) and the *Final Environmental Impact Statement for the Nevada Test Site and Off-site Locations* (DOE 1996b), respectively.

## 2.4 ALTERNATIVE A – OFFSITE SHIPMENT OF HLW, LLW, MIXED LLW, AND TRU WASTE TO DISPOSAL, AND ONGOING MANAGEMENT OF WASTE STORAGE TANKS

Under Alternative A, DOE's Preferred Alternative, DOE would ship Class A, B and C LLW and mixed LLW to one of two DOE potential disposal sites (in Washington or Nevada) or to a commercial disposal site (in Utah), ship TRU waste to WIPP in New Mexico, and ship HLW to the proposed Yucca Mountain HLW repository. LLW and mixed LLW would be shipped over the next 10 years. TRU waste shipments to WIPP could occur within the next 10 years if the TRU waste is determined to meet all the requirements for disposal in this repository; however, if some or all of WVDP's TRU waste does not meet these requirements, the Department would need to explore other alternatives for disposal of this waste. HLW would continue to be stored on the site until 2025 or later, then shipped to the proposed Yucca Mountain Repository. Although this period would extend well beyond the 10 years required for all other proposed